

ABSTRACT OF THE DISCLOSURE

5 A current switch. The novel current switch includes a differential pair of transistors Q1 and Q2, a pair of cascode transistors Q_A and Q_B coupled to Q1 and Q2, respectively, and a circuit for maintaining Q_A and Q_B in an 'on' state regardless of the states of Q1 and Q2. The circuit for keeping Q_A and Q_B on includes first and second current sources adapted to supply first and second trickle currents to the emitters of
10 Q_A and Q_B, respectively. The bases of Q_A and Q_B are connected in common to a voltage source V_{REF4}, which, in an illustrative embodiment, is implemented using a Schottky diode for lower impedance. The circuit for driving Q1 and Q2 may also be implemented using a current switch with trickle current, cascode transistors Q14 and Q15 to further improve settling times.